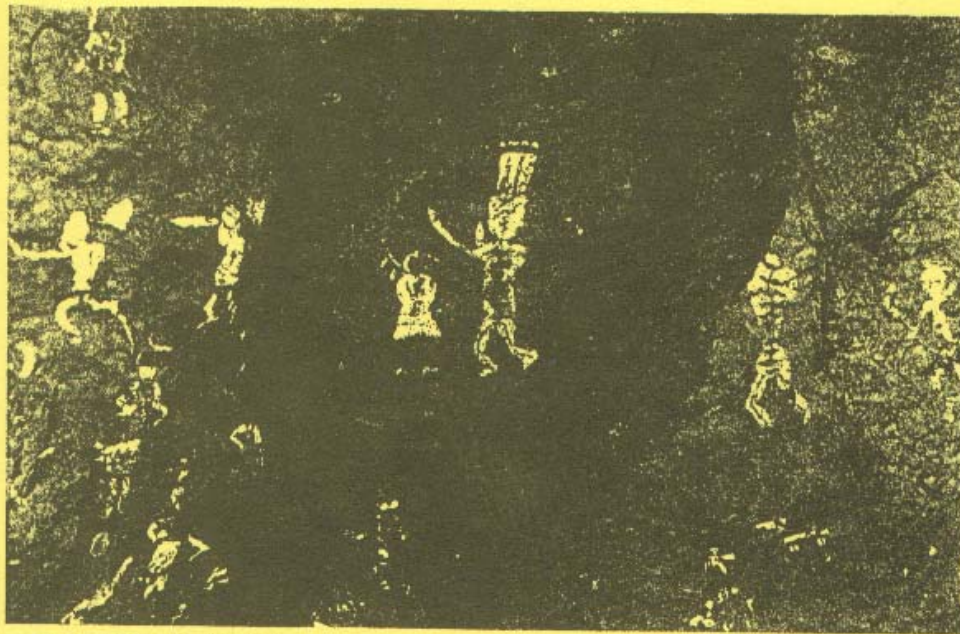


# Section 5

## *Special Management Areas - Areas of Critical Environmental Concern*



Arroyo del Tajo pictographs

## **SPECIAL MANAGEMENT AREAS**

### **INTRODUCTION**

This section contains information on the Special Management Areas (SMAs) identified in this Resource Management Plan (RMP). The SMAs include areas identified in previously approved planning documents as well as newly designated areas requiring special management.

The narratives for each SMA include a general description, the management goals, the planned actions, and a location map. No maps are included for the threatened or endangered (T&E) plants and cultural resources SMAs because these sites are sensitive and could be subject to vandalism. The descriptive narratives of the SMAs vary due to the nature of the management attention each area has received. Detailed activity plans will be developed and will contain more specific information. The management goals and planned actions identified provide the reader with the general management emphasis the SMA will receive. It is important to note that the information described in this document is subject to modification during the preparation of the activity plans.

The SMAs for the Socorro Resource Area (SRA) are listed below.

#### **Special Management Areas**

##### **Rangelands**

- |                |                     |
|----------------|---------------------|
| 1. Sawtooth*   | 10. Agua Fria*      |
| 2. Soaptree *  | 11. Horse Mountain  |
| 3. San Pedro*  | 12. Iron Mine Ridge |
| 4. Harvey Plot | 13. Taylor Canyon   |

##### **Cultural**

##### **Watershed**

- |               |                     |
|---------------|---------------------|
| 5. Stallion   | 14. Tinajas*        |
| 6. Puertecito | 15. Fort Craig      |
| 7. Fence Lake | 16. Teypama         |
|               | 17. Newton Site     |
|               | 18. Playa Pueblos   |
|               | 19. Rio Salado      |
|               | 20. Town of Riley   |
|               | 21. Mogollon Pueblo |
|               | 22. Mockingbird Gap |
|               | 23. Zuni Salt Lake  |

##### **Wildlife**

8. Ladron Mountain\*  
9. Pelona Mountain

### **Recreation**

24. Cerro Pomo
25. Continental Divide National Scenic Trail
26. Datil Well Campground
27. Walnut Canyon
28. The Box
29. San Lorenzo Canyon

\*Designated as an ACEC.

## **AREAS OF CRITICAL ENVIRONMENTAL CONCERN DESIGNATIONS**

Areas of Critical Environmental Concern (ACEC) are defined in the Federal Land Policy and Management Act (FLPMA) as “. . . areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural system or processes, or to protect life and safety from natural hazards “ The regulations require that areas of potential ACECs must meet both of the following criteria:

- 1) Relevance: There shall be present a significant historic, cultural, or scenic value; a fish or wildlife resource or other natural system or process; or natural hazard.
- 2) Importance: The above described value, resource, system, process, or hazards shall have substantial significance and values. This generally requires qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause of concern. A natural hazard can be important if it is a significant threat to human life or property.

Where BLM determined that the ACEC criteria for relevance and importance was met, these areas have been specifically designated.

## SMA PLANNED ACTION DEFINITIONS

1. Restrict authorization for rights—of—way (ROWs) and leases: pertains to restricting the size and the type of new ROW and lease authorization within specific areas. Restrictions may vary depending upon management objectives of the specific SMA.
2. Exclude authorization for ROWs and leases: pertains to excluding all new ROWs and leases.
3. Limit fire suppression: pertains to limiting fire suppression to initial attack procedures excluding the use of heavy equipment and aerial tankers.
4. Restrict mineral material disposals: pertains to restricting the amount and location for sales and free—use permits of gravel, sand, and other common variety minerals in specific areas such that these sales will be nonimpairing to the major resources being managed for in those areas.
5. Restrict geophysical operations: pertains to restricting geophysical exploration activities to nonvehicular methods such as foot travel or use by helicopter.
6. Exclude vegetative material sales: pertains to excluding or closing a specific area to the sale of living plants, specifically yuccas.
7. Designate grazing allotments in “M” category: pertains to designating allotments within certain watershed areas in “M” or maintain range vegetative class condition for an absolute minimum and provides for enhanced management opportunities.

## 8. Fluid leasing stipulations:

SRA—1 Surface use or occupancy will be strictly Controlled in these areas to mitigate special values, special purposes or areas that require special attention. Use or occupancy will be authorized only when it has been demonstrated that the area is essential for operations. The lessee/operator may be required to submit a surface use and operations plan to the BLM for the purpose of mitigating these special concerns.

SRA—2 Surface disturbing activities will be allowed only during specified time periods.

SRA—3 No surface occupancy will be allowed.

NM—5: Lands within the White Sands Missile Range Extension Area.

Missile firing shutdown — The lease is located within the WSMR Extension Area. Persons operating the leasehold will be requested to evacuate the leasehold on those days that missiles are being fired.

9. Limited or closed to motor vehicle use —see Glossary for off—road vehicle (ORV) definition

10. Acquire nonpublic lands — BLM will entertain proposals from the State and from private landowners and will also introduce its own proposals to acquire these identified parcels. However, all land ownership adjustments will be strictly voluntary and done in close coordination with the parties involved.

## 1. SAWTOOTH — 120 Acres

General Description: The Sawtooth ACEC is located northwest of Datil, New Mexico. The area is characterized by steep ridges and footslopes.

The soils composing the plant habitat are of highly erodable sandstone and clay, usually in association with the Baca formation. Pinyon—juniper is the dominant vegetation aspect. Other vegetation common to the area include: broom snakeweed, rabbitbrush, blue grama, bottlebrush squirreltail, and galleta.

Sawtooth contains approximately 120 acres, part of which is habitat to a small population of Erigeron rhizomatous (Rhizome fleabane). This species is listed by the U.S. Fish and Wildlife Service (FWS) as a threatened plant, under the Endangered Species Act (ESA) of 1973.

The area was nominated for special management because of the sensitivity of the species. This mutual concern is shared by both the New Mexico Energy, Minerals, and Natural Resources Department (NMEMNRD) and the Nature Conservancy. Activities that could jeopardize the plant and its habitat include, intensive livestock or recreational use and fire. These concerns help establish the importance and significance of this area and its designation as an ACEC.

Management Goals: Sawtooth ACEC will be managed to protect the habitat of T&E plants.

### Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Exclude authorization for ROWs and leases.
3. Fluid Leasing Stipulation SRA—3.
4. Withdraw from locatable mineral entry.
5. Acquire legal access.
6. Initiate monitoring studies.
7. Develop an allotment management plan (AMP).
8. Designate as fire suppression area.

## 2. SOAPTREE – 1200 Acres

General Description: The Soaptree SMA contains approximately 1,200 acres, and is located 27 miles southeast of San Antonio, New Mexico. The SMA occurs on gently sloping or undulating slopes or plains. The vegetation aspect is yucca. Other species occurring in the area include ephedra, sand sagebrush, winterfat, broom snakeweed, black grama, sand dropseed, bush muhly, and threeawns.

The area was nominated as an SMA because of the aesthetic and recreational values it possesses. The SMA lies just north of the Jornada del Muerto Wilderness Study Area (WSA). Large, dense stands of yucca dominate the desert scenery. Although yucca stands appear in other parts of the SRA, they do not appear at the size and density that they do in this area.

With the increasing demand for yucca for landscape purposes, it becomes necessary to monitor and conserve areas for future use by the public.

Management Goals: Soaptree SMA will primarily be managed for grazing use, to improve recreational opportunities and to protect the unique, natural and scenic soaptree yucca type ecosystem.

### Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorization for ROWs and leases.
3. Fluid Leasing Stipulation SRA—1.
4. Exclude vegetative material sales.
5. Restrict mineral material disposals.



### 3. SAN PEDRO — 1,200 Acres

General Description: The San Pedro ACEC contains approximately 1,200 acres, and is located east of San Antonio, New Mexico. The area is characterized by low ridges, footslopes, arroyos, and water courses. Soils are shallow to deep, and usually very gravelly with underlying layers of fine sandy loams and caliche.

Vegetation within the area is of a mixed—shrub grassland type with juniper, snakeweed, creosotebush, Apache—plume, black grama, galleta, fluffgrass, sand dropseed, and a variety of other species making up the ecosystem.

The area was nominated by the Nature Conservancy and the NMEMNRD for special management because it is habitat to the plant species, Amsonia fugatei. This species of Amsonia, native to the Southwestern United States and Northwestern Mexico consists of a few, generally small, isolated populations. No two populations are precisely alike and classification is a problem when comparing phenotypic variation within and between populations (McLaughlin 1985). The species of Amsonia here cited possesses a sufficiently distinctive combination of characters to warrant its recognition as a new species (McLaughlin 1985).

The San Pedro ACEC meets the importance criterion for ACEC designation because of the sensitivity of the plant species Amsonia fugatei. The species has been proposed to the FWS for listing as a Federal candidate on the endangered species list.

Management Goals: San Pedro ACEC will be managed to maintain and protect the habitat for Federal T&E plants.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Exclude authorization for ROWs and leases.
3. Fluid Leasing Stipulation SRA—I and NM—5.
4. Initiate monitoring studies.
5. Restrict mineral material disposals.

### 4. HARVEY PLOT – 3 Acres

General Description: The Harvey Ecological Plot SMA is located northeast of Bingham, New Mexico on Chupadera Mesa Allotment, No. 1368 Soils on the site are usually shallow over limestone although deep pockets may exist.

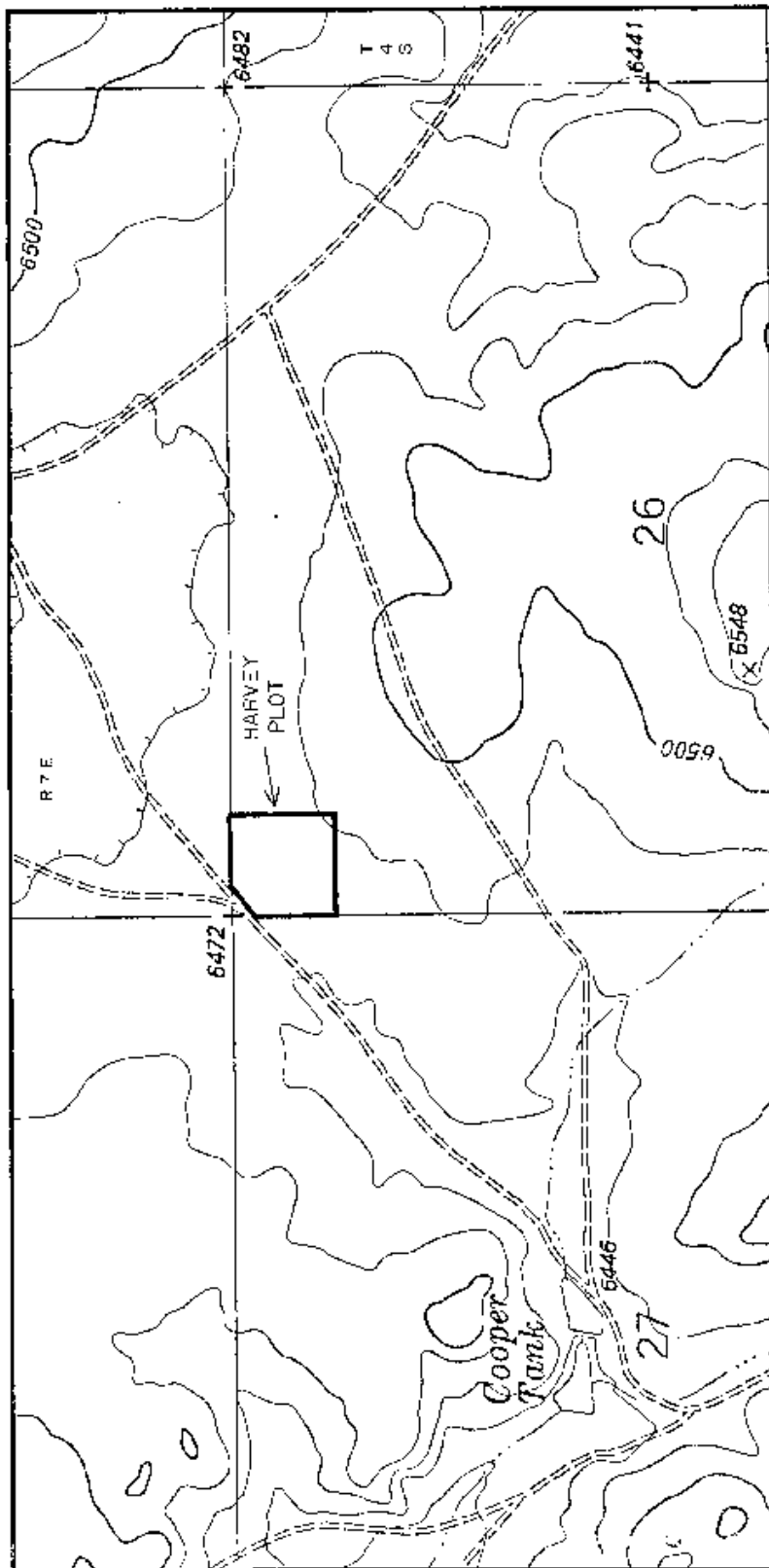
The 3—acre study plot was established in 1962 by the BLM. Its purpose was to provide information to determine the effect of rodents on native vegetation as well as study the ecology of range for rainfall and soil types.

Vegetation on the area includes, juniper, skunkbush sumac, black grain, sideoats grama, blue grama, New Mexico feathergrass and other species.

Management Goals: The Harvey Plot SMA will be managed to provide vegetative use data for future scientific use.

Planned Actions:

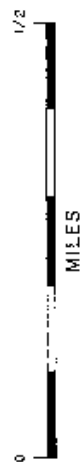
1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorizations for ROWs and leases.
3. Fluid Leasing Stipulations SRA—I and NM—5.
4. Withdraw from locatable mineral entry.



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LAS CRUCES DISTRICT - SOCORRO RESOURCE AREA

### HARVEY PLOT

SPECIAL MANAGEMENT AREA



## 5. STALLION — 22,840 Acres

General Description: The Stallion SMA is located approximately 8 air miles east of Socorro, New Mexico. The unit encompasses 22,840 acres of which 19,840 acres are public, 1,920 acres are State, and 1,080 acres are private. The western part of the SMA encompasses the Sierra de las Canas and Presilla WSAs. Until Congressional action the area will be managed under the Interim Management Policy and Guidelines for Lands Under Wilderness Review (USD1, BLM, as amended, 1983).

The SMA is located within the Chihuahuan Desert. Maximum summer temperatures range from 90 to 100+ degrees Fahrenheit. Winter temperatures are generally mild during daylight hours (40 to 50 degrees Fahrenheit) and moderately cold at night (15 to 30 degrees Fahrenheit). Spring and fall temperatures tend to be mild. The spring season typically is accompanied by winds ranging from 10 to 40 miles per hour.

Precipitation averages 10 inches per year. Over half the annual rainfall is received during the summer thundershower season (July through September). A third of the year's precipitation usually falls during the winter months (December through March). The remaining moisture, normally 10 percent or less, is received in the spring and fall months.

The SMA is varied in landscape, a rugged desert mountain range characterized by sheer rock escarpments, deep narrow canyons, ridges, mesa tops, broken badlands, rolling pinyon—juniper, and grass covered hills. Elevations range from 5,100 to 6,200 feet with a maximum relief of 1,100 feet.

The SMA is located within the Rio Grande and Jornada del Muerto surface water drainage basins. There are no permanent streams or surface water bodies within the SMA. However, the normally dry arroyos occasionally carry storm runoff to the Rio Grande and Jornada del Muerto immediately after rainfall within their respective drainage areas. Periods of flow are short and may be widely spaced in time due to intermittent and sporadic rainfall patterns. Runoff averages 0.1 inches per year.

Soils of the SMA vary from moderately deep to deep and loamy in swales and lower areas to coarse textured, gravelly, ranging from deep to shallow over bed rock. Portions of the area contain gypsum. Much of the SMA is in a critical erosion class with the remaining being moderate. Active and severe sheet and gully erosion is occurring over much of the SMA; particularly in the central and eastern parts. There have been several erosion control projects completed in the past on portions of the SMA. These projects have primarily entailed construction of wire check dams. Most of the work appears to have been completed in 1965. For a more complete description of the watershed refer to a watershed program report completed in May 1983 located in the SRA office.

The vegetation of the SMA is typical of the upper Chihuahuan Desert at the northern extreme of its range. Vegetation types have been identified as: desert shrub, pinyon—juniper, creosote, and grassland.

The desert shrub vegetation type encompasses dominant shrubs such as cholla and squawberry associated with winterfat, creosote, Mormon tea (et al). Grasses include gramas, dropseeds, muhly, alkali sacaton, and galleta. Prominent forbs include globemallow and wild buckwheat among others.

Pinyon—juniper covers much of the central and northeastern part of the SMA. The understory vegetation is dominated by warm—season grasses of which the gramas are most prevalent. Cool—season grasses associated with this type include silver bluestem and Indian ricegrass among others. Associated shrubs include yucca, Mormon tea, squawberry, cholla, and prickly pear. Forbs, to include a few, are globemallow, hog potato, and aster.

The creosote community includes creosote, cheatgrass, bush muhly, and broom snakeweed as dominants. Other common species are mesquite, mariola, and grasses such as black grama, galleta and dropseed. Forbs of this type include desert holly and pepperweed among others.



The short grass subtype of the SMA are dominated by grama grasses and also include dropseeds, burrograss, and muhly. Associated shrubs of this type include cholla, Mormon tea, and slender gray sagebrush. Russian thistle, globemallow, and desertholly are some forbs included in the type.

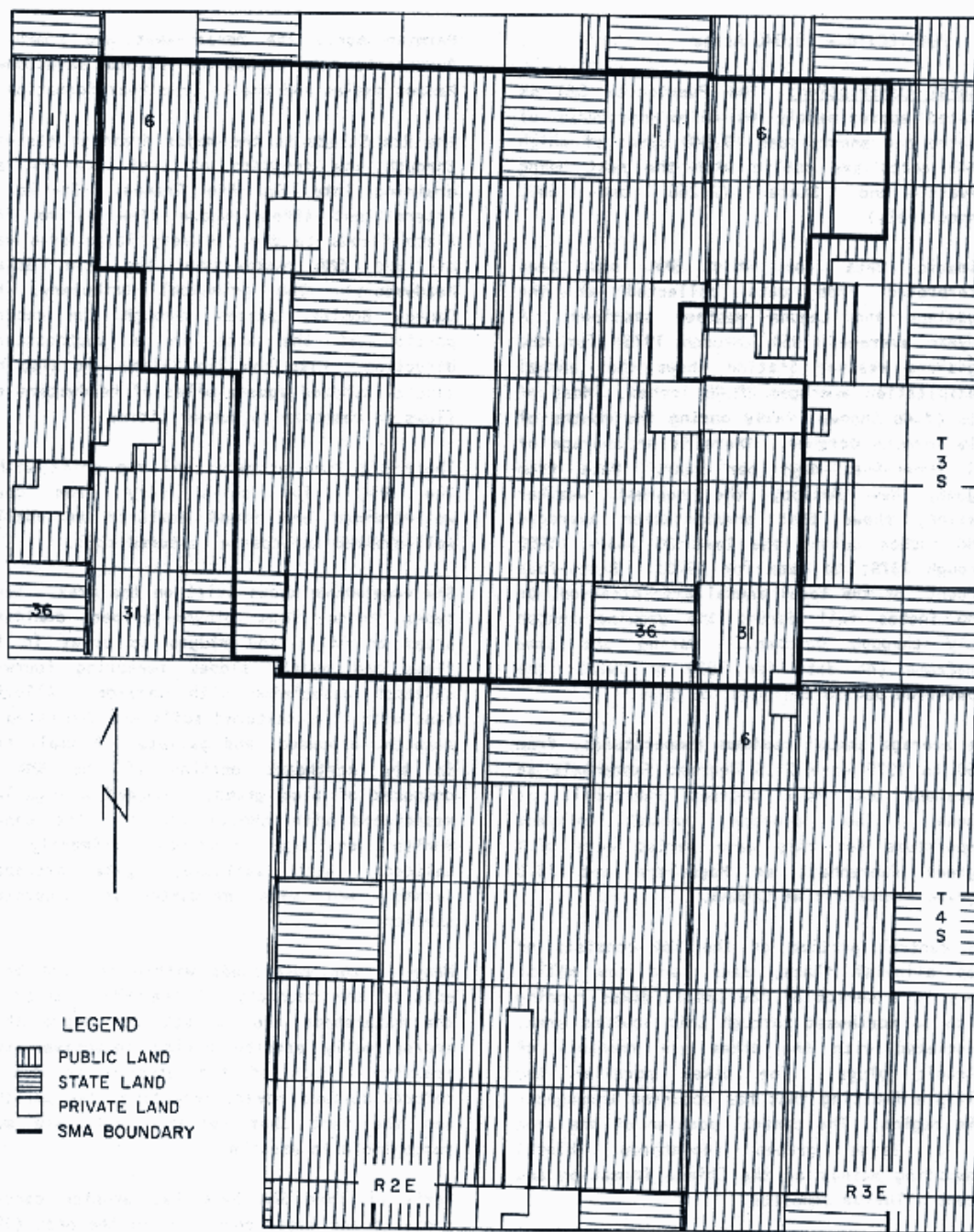
The mid—grass subtype is characterized by alkali sacaton. Giant sacaton also occurs in the overflow drainages of the WSA. Other grasses present are burrograss, blue grama, galleta, vine—mesquite, and mat muhly. Forbs include Russian—thistle, desertholly, white horse nettle, and, threadleaf groundsel. The only shrub of significant composition in this subtype is broom snakeweed. However, traces of one—seed juniper, fourwing saltbush, cholla, and Apache—plume are present.

For a more detailed description of the vegetation of the SMA refer to the New Mexico State Wilderness Analysis Report for the Sierra de las Canas and Stallion WSAs. This report is located in the SRA office. Other resources of the SMA include wildlife, range, cultural, mineral, forestry, and recreation.

Management Goals: Stallion SMA will be managed to protect and rehabilitate this critical watershed area through efforts to control erosion by minimizing surface disturbance, closure and rehabilitation of unneeded roads when additional inventory is complete, and monitoring and control of ORV use.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorization for ROWs and leases.
3. Fluid Leasing Stipulation SRA—1 and NM—5.
4. Designate grazing allotments in “M” category.
5. Acquire nonpublic lands.
6. Close and rehabilitate certain trails as a part of the activity plan.



LEGEND  
PUBLIC LAND  
STATE LAND  
PRIVATE LAND  
SMA BOUNDARY

0 3  
SCALE OF MILES

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LAS CRUCES DISTRICT - SOCORRO RESOURCE AREA

STALLION  
SPECIAL MANAGEMENT AREA

## 6. PUERTECITO — 10,040 Acres

General Description: The Puertecito SMA is located approximately 40 miles northwest of Socorro and encompasses 10,040 acres of which 7,140 acres are public with the rest being private and State (2,260 and 640, respectively).

Climatic data for this SMA has been interpreted from data collected at the Magdalena and Laguna weather stations. A 25—year average (1951 through 1975) for the Magdalena Weather Station shows that annual precipitation averages 10.85 inches. Most of this (7.48 inches) falls during the months of July through October. There is an average of 154 frost—free days per year. Data from Laguna, New Mexico, the nearest weather station, shows that precipitation averaged 8.86 inches during the last 26 years (1950 through 1975; no data for 1970). Sixty—four percent, of the total annual precipitation, or 5.66 inches fell during the growing season (July through October). During the same time frame (no data for 1970 or 1973), the frost—free period averaged 160 days.

The average annual maximum temperatures, from 1960 to 1979 were 71.5 degrees Fahrenheit at Magdalena and 74.7 degrees Fahrenheit at Laguna. The average annual minimum temperature for this same period were 32.1 degrees Fahrenheit at Magdalena and 30.8 degrees Fahrenheit at Laguna.

The central portion of the SMA consists of deep alluvial flats, fans, and low hills. There is a series of low basalt dikes running north to northwest through this lowland area. Associated with the dikes are remnants of volcanic plugs. The dikes parallel the multiple faulting that has occurred throughout this region. The central portion of the area is a large graben (downthrow block) consisting mainly of the Chinle formation and recent alluvium deposits.

West tilting uplifted blocks form the high mesas on the east, west, and southwest boundaries of the area. Mesa de la Cienaga on the east consists of limestones and sandstones from the San Andres and Glorieta formations of

Permian Age. The mesas west and south of Puertecito are capped by Dakota sandstones, Mancos shales and the La Cruz Peak formation.

The Rio Salado is the major drainage eastward through the southern part of the SMA and draining into the Rio Grande. It is an intermittent stream whose flow varies from flash floods to dry. A very large area west of the SMA makes up the Rio Salado headwaters. The principal tributary, the Canada Bonita, passes through the central portion of the area in a southeasterly direction. Like the Rio Salado, it also has several hundred square miles of headwaters and flows in response to summer storms.

There are five primary soil map units within the SMA. The soils vary from deep, well—drained and fined textured to shallow well—drained and coarse textured soil.

Six vegetative types exist on the area. These types range from pinyon—juniper dominated areas on hills and ridges to areas in the flats and gentle slopes featuring fourwing saltbush associated with sacaton. Alluvial fans with fine textured soils are dominated by sacaton, dropseed, and galleta. A small area in the northeast portion of the SMA is composed of blue grama, dropseed and galleta associated with cholla cactus. The Canada Bonito drainage consists primarily of saltcedar with saltbush, spike dropseed, sacaton and vine mesquite as understory species.

Many of the watersheds within the SMA begin outside the boundary of the SMA. Generally the watersheds are subject to severe sheet and/or gully erosion during intensive storm activity. Much of the erosion is due to reduced surface cover, intensive flow periods, and the fact that certain soils are more susceptible to erosion.

Parts of this SMA have had erosion control projects and tests completed in the past (1964 and 1982). In 1964, 2,200 acres of the SMA were ripped and seeded, and an experimental dike project in 1982 consisting of contour dikes (13,800') and wire checks (4,150') was constructed. For more specific information on

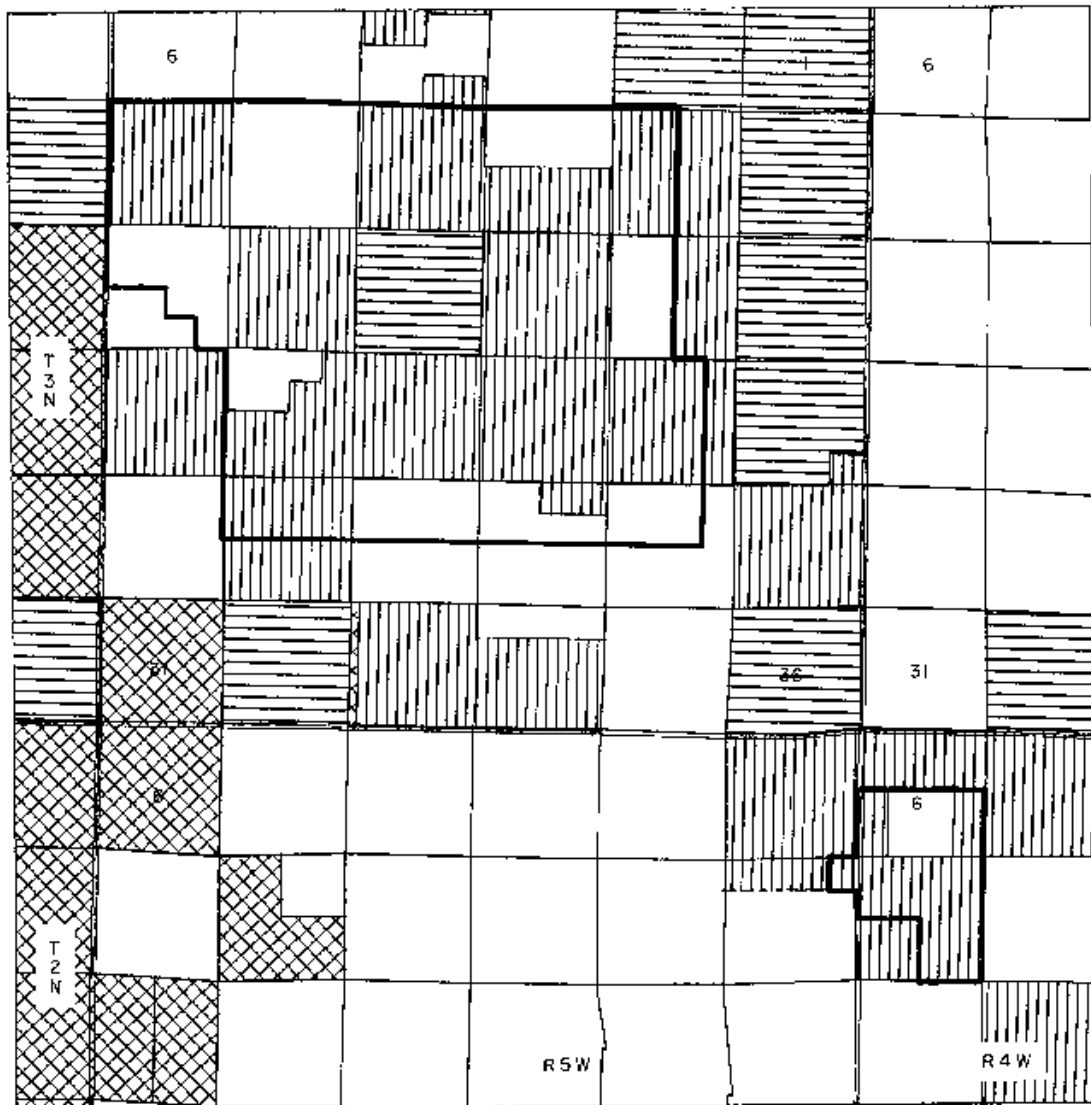
the projects and a detailed description of the soils and vegetation, refer to the Puertecito—Barranco watershed plan in the SRA office.

Other resources wildlife, range, recreation. There are portions of two grazing allotments within the SMA include cultural, mineral, and the SMA (Puertecito and Barranco).

Management Goals: Puertecito SMA will be managed to protect and rehabilitate this critical watershed area. Efforts will be made to control erosion by minimizing surface disturbance, closure, and rehabilitation of unneeded roads, when additional inventory is complete, and monitoring and control of ORV use.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorizations for ROWs and leases.
3. Fluid Leasing Stipulation SRA—I.
4. Designate grazing allotments in "M" category.
5. Close and rehabilitate certain vehicle trails as part of the activity plan.

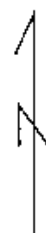


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LEGEND

- PUBLIC LAND
- STATE LAND
- PRIVATE LAND
- INDIAN LAND
- SMA BOUNDARY

PUERTECITO  
SPECIAL MANAGEMENT AREA



## 7. FENCE LAKE — 32,840 Acres

General Description: Fence Lake SMA is located in northwestern Catron County approximately 20 air miles northwest of Quemado, New Mexico. It encompasses 32,840 acres of which 25,280 are public, the rest of which are private and State (3,480 and 4,080, respectively).

The SMA is on the border of the northwestern plateau and southwestern mountains climatic regions. Climatic data is available from four stations near the area: Quemado, Salt Lake, Fence Lake, and the Goesling Ranch. Only a few years' data is available at Salt Lake and the Goesling Ranch. Quemado is in the southwestern mountains climatic region and Fence Lake is in the northwestern plateau region so the climate for the area is somewhere in between the two. Generally, Fence Lake receives more precipitation than Quemado with an average annual value of 12.42 inches for the 1970s. Quemado had an average annual value of 10.98 inches during this same period. Historically, there has been a large variation in average annual precipitation. Average annual temperatures are nearly the same for Fence Lake and Quemado, about 47.7 degrees Fahrenheit. Frost—free days are in the 103 and 106 range.

There are three major land forms: the nearly level mesa tops, the steep sandstone and shale escarpments and hills, and the gently sloping alluvial fans and drainageways. Most of the severe gulying problems, common to this area, occur on the alluvial fans and drainageways.

The SMA contains four major geologic systems: Quaternary, Tertiary, Cretaceous, and Triassic in an east—west plunging syncline in the western portion of the unit. The bottom of the syncline is near the center of the western section of the area and slopes upward to mesas north and south. The syncline and structural movements undoubtedly had an influence on the arroyo cut and fill cycles in Twenty—two Draw. For a detailed description of the

geologic units refer to the Cox and Estrada watershed plans in the SRA office.

A small portion of the SMA lies within the maximum coal potential area and application of land—use screens will be applied to those areas for management of coal resources.

Soils vary considerably from relatively deep and well—drained to shallow over shale. Much of the area is rock outcrop varying to badland alluvial fans and plains. Soil textures vary from clay to sandy loams to extremely gravelly loamy coarse sands. Erosion potentials vary from slight to high. For a more detailed description of soil units refer to the activity plans referenced above.

Topography is comprised of plains and alluvial fans generally in the southern part and interspersed with rolling hills to high mesas and escarpments to the north. Elevations vary from 6,400 feet in the bottoms to over 7,400 in the northeast.

Much of the watershed is subject to severe headcutting, soil piping, and sheet erosion resulting in numerous continuous and discontinuous gullies. Past erosion control measures have included construction of gully plugs, detention dams, wire checks, etc. Much of the existing erosion control system needs maintenance as many of the structures are at capacity or have failed.

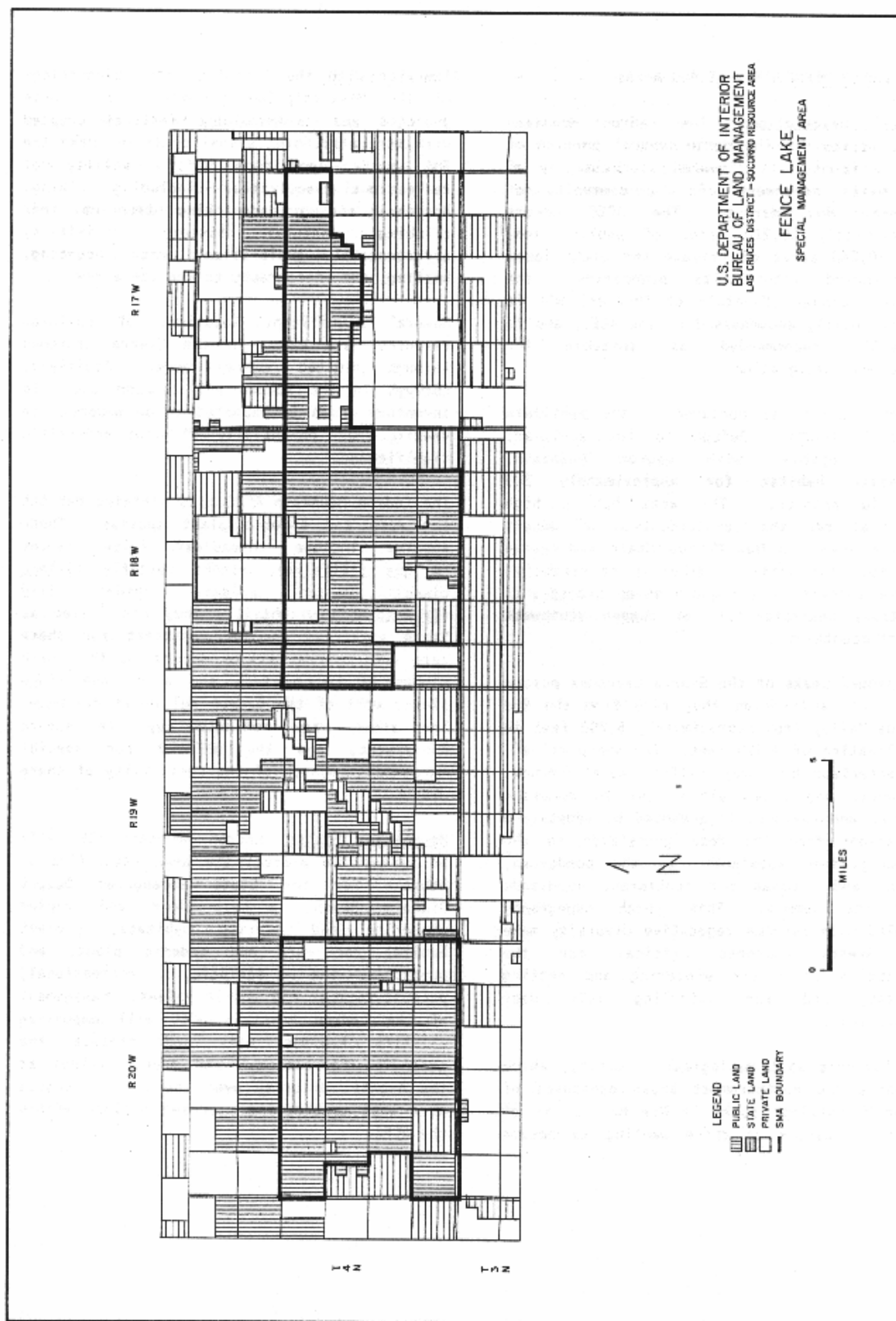
Vegetation varies from giant or alkali sacaton, and scattered shrubs such as fourwing saltbush, Apache—plume in the wetter bottomlands to alkali sacaton, western wheatgrass, blue grama, galleta, mixed with fourwing saltbush, wolfberry, and winterfat in finer textured uplands. Much of the area is pinyon—juniper woodland in the higher elevations and mesas.

Other resources include wildlife, range, forestry, cultural, and mineral. There are two active grazing allotments (Cox and Estrada).

Management Goals: Fence Lake SMA managed to protect and rehabilitate critical watershed through efforts to control erosion by minimizing surface disturbance, closure and rehabilitation of unneeded roads when additional inventory is complete, and monitoring and control of ORV use.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorizations for ROWs & leases.
3. Fluid Leasing Stipulation SRA—I.
4. Designate grazing allotment in “M” category.
5. Close and rehabilitate certain vehicle trails.





## 8. LADRON MOUNTAIN — 62,460 Acres

General Description: The Ladron Mountain ACEC, located in the north—central portion of Socorro County, is situated approximately 15 air miles northwest of the community of Socorro, New Mexico. The ACEC covers approximately 52,220 acres of public land, with 10,240 acres of private and State lands intermingled within its boundaries. The Sierra Ladrones (Mountain of Thieves) WSA is almost totally encompassed by the ACEC, and is presently recommended as suitable for wilderness designation.

Ladron Mountain is bordered by the Sevilleta National Wildlife Refuge to the southeast which, together with Ladron Mountain, possesses habitat for approximately 200 wildlife species. The area has a high potential for the reintroduction of desert bighorn sheep, a New Mexico State endangered species. The habitat, which is so conducive to the success of a bighorn sheep transplant, is truly characteristic of rugged southwest desert mountains.

The jagged peaks of the Sierra Ladrones pose a prominent landmark as they rise from the Rio Grande Valley from approximately 5,200 feet to an elevation of 9,176 feet. The sharp relief, characterized by rocky cliffs, mesa rimrock, badlands, and steep slopes cut by numerous canyons and ravines, is accented by vegetative variations from the mesa grasslands to the pinyon—juniper woodlands, to the ponderosa, aspen, and Douglas fir coniferous woodlands near the summit. This rough topography coupled with extreme vegetative diversity make the Sierra Ladrones critical for the protection of raptor wintering and nesting habitat, and for dwindling mule deer populations.

The Ladron's vast geological diversity, which contains the northernmost known exposures of lower Mississippi rocks in New Mexico, is of special interest to those wanting to become familiar with the lithology and paleontology of the Mississippian geologic era. These geologic and paleontologic features coupled with its outstanding visual qualities make the SMA quite appealing for a variety of recreational activities including hiking, horseback riding, backpacking, technical rock climbing, natural history activities, environmental exploration, rock hounding, hunting, and photography to mention a few.

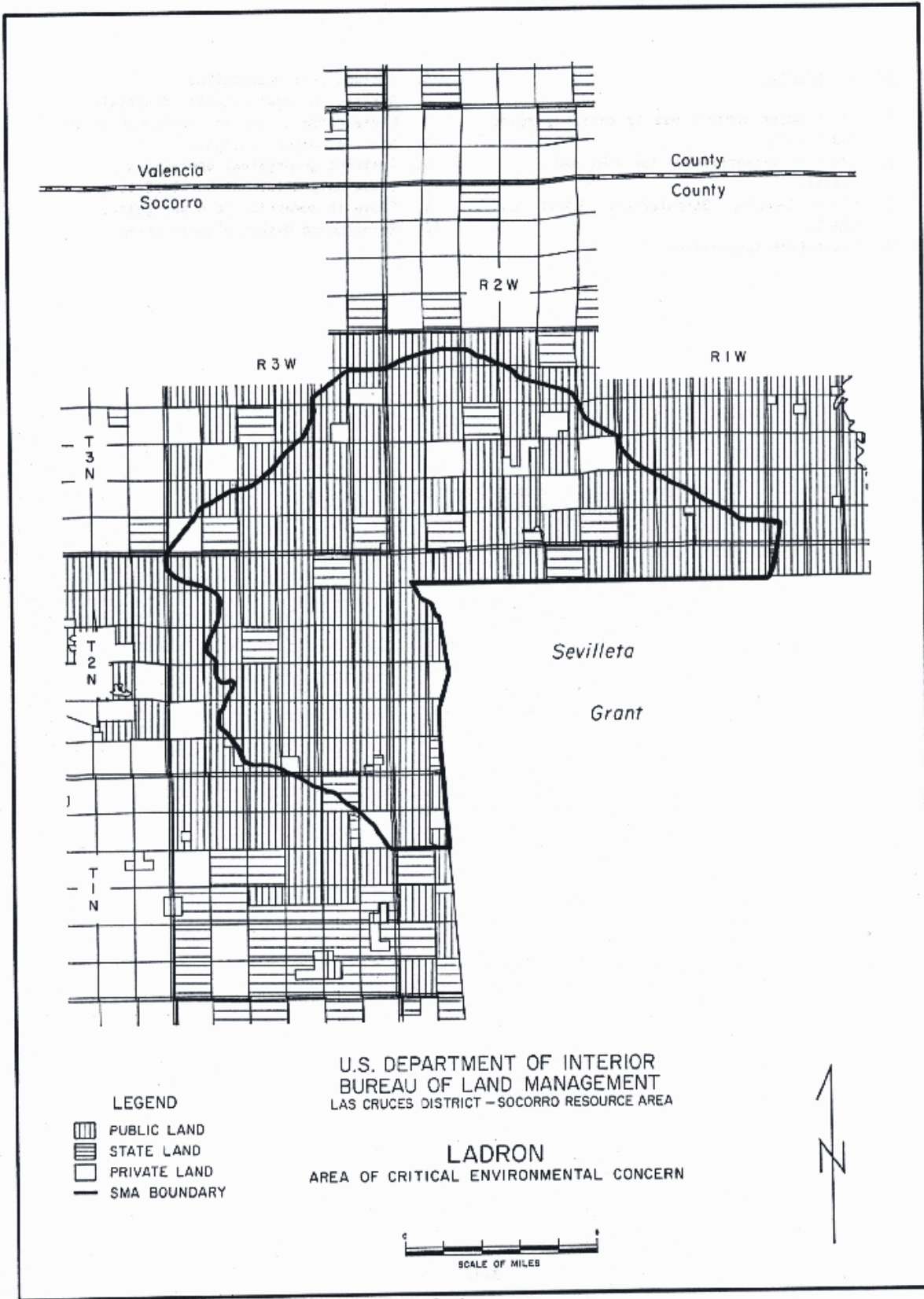
Several significant locations of cultural resources are known in the Sierra Ladrones through limited survey work. Additional surveys in the future will expand the site inventory which is expected to be moderate in density, but potentially of high scientific significance.

The Ladron Mountain ACEC also contains habitat for rare and endemic plant species. These species include threadleaf false carrot (*Aletes filifolia*), planks catchfly (*Silene Dlankii*), and Wrights spider lily (*Tradescantia wriczhtii*). They are listed as State sensitive species. Habitat for these rare and endemic plants occurs on the north slopes of Ladron Peak and along the ridge slopes west of the Canyon del Norte drainage. The areas were nominated by the Nature Conservancy and the NMEMNRD for special management because of the sensitivity of these plants.

Management Goals: Ladron Mountain ACEC will be managed to protect the area identified as habitat for the State endangered Desert Bighorn Sheep; protect deer and raptor wintering and nesting habitats; protect habitat for rare and endemic plants and protect the geologic, recreational, paleontological and scenic values. Management of the Ladron Mountain ACEC will emphasize wildlife habitat uses and protect the geologic, recreational and scenic values as the highest priority over the other resource uses when considering proposed actions within the ACEC.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorization for ROWs and leases.
3. Fluid Leasing Stipulations SRA—1 and SRA—2.
4. Limit fire suppression.
5. Exclude from woodcutting.
6. Restrict mineral material disposals.
7. Close certain vehicle trails——18 miles.
8. Acquire nonpublic lands.
9. Restrict geophysical operations.
10. Close only allotment No. 1152 to grazing.
11. Close to domestic sheep and goats.
12. Reintroduce Desert Bighorn Sheep.



## 9. PELONA MOUNTAIN — 78,320 Acres

General Description: The Pelona Mountain SMA is located in Catron County, at the southwest edge of the Plains of San Augustine, approximately 29 air miles southwest of Datil. The SMA contains 78,320 acres of which 56,880 are public, 9,960 are State, and 11,480 are private. Pelona Mountain SMA varies in elevation from 6,780 feet up to 9,212 feet. The majority of the SMA is characterized by rugged canyons and rough hilly to mountainous country.

The major vegetative associations include ponderosa pine mountains, pinyon—juniper hills, half—shrub hills, rabbitbrush—grama hills, and saltbrush—grama valleys.

There are 309 potentially—occurring wildlife species on Pelona Mountain. Game species include mule deer, elk, pronghorn antelope, mountain lions, black bears, and turkey. Other species include bobcats, coyotes, gray fox, porcupines, jackrabbits, cottontails, squirrels, chipmunks, raptors, and various species of songbirds, reptiles and amphibians. The SMA has also been identified by the FWS as providing potential habitat for bald eagles, peregrine falcons, and black—footed ferrets; all are Federally endangered species. Wintering bald eagles are known to utilize portions of the SMA.

Currently, forage availability is not a limiting factor. Much of the SMA is in good condition, and has adequate forage available for wildlife; however, some areas do have considerable potential for improvement.

The Pelona Mountain SMA is a rugged landscape which exhibits the diversity of color, vegetation, relief, shape, and geology characteristic of pine—forested mountains. Numerous vantage points exist along ridges and other high points within the SMA offer spectacular vistas. Views from the 1,200—foot

escarpment along the western edge of the SMA extend across the Plains of San Augustine and encompass much of west—central New Mexico.

The western portion of the Continental Divide WSA (NM—020—044) is located within the Pelona Mountain SMA. This portion has been recommended as “suitable” for wilderness designation and is currently being managed under the Interim Management Policy and Guidelines for Lands under Wilderness Review (USD1, BLM, as amended, 1983). This management will continue until Congress decides for or against wilderness designation on this area.

Recreation uses in this SMA include scenic sightseeing, big game hunting, backpacking, and hiking; however, the area offers a high potential for camping trips, and nature photography and study also.

The Continental Divide crosses the Pelona Mountain SMA and presently attracts a few hikers following the route of the Continental Divide. Should the Continental Divide National Scenic Trail (CDNST) actually be designated and routed through the SMA, use would undoubtedly increase.

Bat Cave, a highly significant archaeological site which is within the Pelona Mountain SMA, is on the National Register of Historic Places (NRHP). Earlier people living in the cave on the shores of the extinct Lake Augustine developed what is believed by some to be the earliest domesticated maize in North America.

Management Goals: Pelona Mountain SMA will be managed to protect elk, deer and raptor wintering and nesting habitats; the geologic, recreational and scenic values; and Bat Cave Cultural Site. Management will emphasize wildlife habitat uses and protect the geologic, recreational, and scenic values as the highest priority over other resource uses when considering proposed actions within the SMA.

Planned Actions:

1. Limit motor vehicle use to existing roads and trails.
2. Restrict authorization for ROWs and leases.
3. Fluid Leasing Stipulations SRA—1 and SRA—2.
4. Exclude from woodcutting.
5. Acquire nonpublic lands.
6. Acquire legal access.
7. Implement Fire Management Plan.
8. Restrict geophysical operations.
9. Develop AMPs on all allotments.
10. Develop Bat Cave Cultural Site.
11. Close certain vehicle trails——5 miles.
12. Close to domestic sheep and goats.

